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Research Article

A blended Mentoring Practice for Designing E-Material for English as a Foreign Language Learning

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Abstract

Learning a new language is a rigorous process for which the language teachers strive to get learners engaged and for sure, instructional technology can help them to find interesting and creative ways. This study aims to reach suggestions for more effective blended mentoring practices by sharing the results of those practices in teacher education. In this paper, a set of ematerials for pre-intermediate English learners at Foreign Languages School of Ege University is developed. In this collaborative study which is a blended mentoring practice, two Information and Communication Technology (ICT) experts are in charge as coordinators with 46 preservice ICT teachers as mentees and five İnstructors of Englishs as mentors. Mentoring process includes planning, practice and evaluation steps. During fall semester of 2015-2016 academic year, all practices took place in Material Design and Use in Education course of Computer Education and Instructional Technology Program at Faculty of Education, Ege University. At the end of this short period, formal mentoring practice, views of English mentors and mentees on blended mentoring practices are collected electronically via questionnaires. In this case

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study, document analysis is performed. For data analysis, descriptive and content analysis techniques are made use of. Prominent findings includes that preservice ICT teachers perceive English mentors as team-mates who help and guide them and also as content experts in professional sense. Blended mentoring practice is welcomed warmly by both mentors and mentees in general and the results are encouraging for those who wish to conduct interdisciplinary, blended learning based studies in teacher education. Blended mentoring which is considered to have reached its goal by strengthening mentor-mentee interaction is suggested to become widespread in teacher education.

Keywords: E-mentoring, blended mentoring, e-mentorship in teacher training, EFL; e-material development

Introduction

Sociocultural theory of development suggests that social interaction plays a fundamental role in the learning process. Within the zone of proximal development concept, Vygotsky states that children form or construct their knowledge in relation to their social interactions with adults or peers who are superior to them in terms of knowledge and experience (Yurdakul, 2015). In this respect, mentoring is described as a more experienced and skillful person's helping a less experienced and skillful person, both personally and professionally with the role of a teacher, instructor and supervisor (Bradbury & Koballa, 2008; Gormley, 2008; Anderson & Shannon, 1998). In the mentoring process, the person who is a beginner, lacks sufficient knowledge and experience, needs guidance and is consigned to a mentor is called mentee (Gu & Day, 2012; Hudson, 2016; Özdemir, 1997).

In a mentoring process mentors should be open to share knowledge, skills and experiences with mentees, and they should be the ones who psychologically support and motivate mentees when necessary. Besides, they are expected to check mentees' performance, comment on their positive and negative sides, offer advice about opportunities and threats, be accessible to their mentees easily and can be asked about any issue, make a good role model when necessary. What is more, it is mentioned that mentors should be the ones who direct mentees according to their abilities and talents (Kuzu, Kahraman & Odabaşı, 2012). It is also stated that a good mentor has qualities such as being mutual, honest, supportive, understanding, related, helpful, principled, respectful, informative, open and willing to authorize, supporting collaboration (Kılınç & Alparslan, 2014).

Thanks to the technological advances, communication between mentors and mentees is not limited to geographical regions. In this respect, the type of mentoring in which mentors interacting mentees on the Internet is specified as electronic mentoring, e-mentoring, telementoring, cybermentoring or virtual mentoring (Brescia, 2002; Kocabaş & Yirci, 2011; Knouse, 2001; O'Neil & Gomez 1996; Single & Muller, 1999). By using the internet, e-mails and online discussion groups, young people who need mentoring overcome time and place obstacles and can get e-mentor support (Hasselbring & Glaser, 2000). For example; when communicating by email, people are freed from the pressure of instant answer, and have the

opportunity to write considering the messages more closely (Single & Muller, 1999). In the globalized world, e-mentoring is also seen as a solution for managers and teachers who have to work away from their cities or countries (Bakioğlu & Göğüş, 2010). For the ones who have to work away from the city or country they live in, e-mentoring helps to reduce stress as a psychosocial support, to socialize, and it provides a support for personal evolution and intercultural education (Wood, 2007). In addition to these, among the other characteristics of e-mentoring, there are its advantages such as taking place instantly, having more application opportunities, personilizing, providing opportunity to share knowledge and experience synchronously and asynchronously (YTÜ-KM, 2016).

Despite all these advantages of e-mentoring, some difficulties are also encountered. Especially in e-mentoring relationships which hold virtual relations developed by a weak faith, lots of misunderstandings occur. Using computer technologies in the process requires computer literacy; and another thing is that technological problems may appear. In addition, in environments where e-mentoring takes place, meeting of people who don't know each other makes it difficult to develop a mutual relation between the mentor and the mentee (Wood, 2007). In opposition to such communication problems appearing in e-mentoring practices which completely take place in electronic environments, it is considered that blended mentoring practices which have face to face communication element can make the process more effective.

Within the framework of electronic mentoring (e-mentoring) which is described as mentoring process carried out via electronic devices, mentoring practices where mentor and mentee communicating not only electronically but also face to face are called blended mentoring or hybrid mentoring practices. As an example for blended mentoring, or shortly b-mentoring, Murphy (2011) carried out a study with the students and graduates of business administration by emails and telephone as well as face to face meetings. According to this study, blended mentoring made positive contributions to both mentors and mentees. It is stated that in this way, mentors became more content due to having the opportunity to do more consultancy, mentees were able to get more support in both professional and psychosocial terms, they better planned their carreer path and they wanted to carry on their relations with their mentors.

In the literature related to e-mentoring and b-mentoring, a lot more positive effects than negative effects are reported. Among the positive features of e-mentoring, its eliminating

logistic barriers between mentors and mentees (Thompson et al., 2010) and mentors' supporting mentees by transferring their experiences and improving their communication skills (Arkün Kocadere & Kızılkaya Cumaoğlu, 2015; Lamb & Aldous, 2012) are mentioned. In addition to this, it is noticed that in Turkey provincial education inspectors and assistant inspectors' professional success increased (Özdemir & Özan, 2013); and professional support and guidance, inspector and investigator, leader, consultant and researcher roles were described (Kılınç & Alparslan, 2014). The negative aspects of e-mentoring are listed as technical problems, difficulties in providing access to computers and not satisfying personal choices (Cothran et al., 2009). On the contrary, b-mentoring practices, in which e-mentoring is supported by face to face communication, mentors who have a chance to supervise more are more content, getting more support both in professional and psychological terms mentees plan their careers in a better way (Murphy, 2011). Furthermore, b-mentoring practices bring solutions for communication problems, which are defined among the limitations of e-mentoring (Thompson et al., 2010).

As seen in the literature, with b-mentoring model communications become more effective, sharing knowledge and experience can be carried out more flexibly and efficiently. Besides, in Turkey the lack of e-mentoring and b-mentoring practices in which student teachers take part points out a gap in the literature about the effectiveness of b-mentoring process in the views of mentors and mentees. In this respect, in a b-learning setting where the strengths of both face to face and online environment are used, making use of b-mentoring in developing student teachers' knowledge and skills with the faculty member and content experts is the starting point of this study. Although it has some inspiration from the work of Arkün Kocadere and Kızılkaya Cumaoğlu (2015) who carried out an e-mentoring practice with CT student teachers, this study, which brings instructors of English and CT student teachers together in terms of b-mentoring practice, brings contribution to the literature as it is a practice of b-mentoring model in teacher education.

This study describes the views of CT student teachers about their getting support from their mentors who are instructors of English, in the process of their designing e-materials for English as a foreign language learning and the views of the mentors about this b-mentoring process. The purpose of the study is to reach suggestions for making b-mentoring practice processes better, planning and disseminating successful practices, by sharing the results of a b-mentoring

practice carried out in teacher education. Apart form this, it is considered that this study will also present the expectations from b-mentors and provide an example for the further studies on this topic.

The subgoals of the study are as follows:

- 1. What are the qualities of the b-mentors according to the views of the mentees?
- 2. What are the views of the mentees about the b-mentoring practice?
- 3. What are the views of the mentors about the b-mentoring practice?

Methodology

This study which is designed as a case study, like Stake mentioned in his responsive evaluation model, it was tried to present the participants' different points of view about the state which was being inquired. The purpose of case study is to analyse a single case or more cases, a participant or a document set within their limits (Bogdan & Biklen, 2007; Yıldırım & Şimşek, 2008). In this study designed as a holistic single case, the practice of b-mentoring which took place makes up the case; the qualities of the mentors, the views of the mentors and mentees about the b-mentoring process are dealt as the elements of the case. The mentoring process is given in detail below in planning, acting and evaluation phases. With this purpose, at the end of the b-mentoring practice the views of both CT student teachers and instructors of English are taken, using the forms prepared by the researchers, which include both open-ended and closed-ended questions. In this respect, the data set of the study is the documents which are based on the statements of the mentors and the mentees. For case studies, as multidimensional data collection (interviews, observations, document analysis) is suggested ideally (Yıldırım & Şimşek, 2008), the data source of this study depending on the statements of the participants is seen as the limitation of the research.

Participants

In this study which was carried out with the coordination of two CT experts, chosen by purposeful sampling method five instructors of English as mentors and 46 CT student teachers as mentees took part in the workgroup. Among the mentees, all of which are females, Mentor-

1 has 17 years of working experience in the institution. Mentor-2 who has a 23 years of experience has participated in different scientific projects before. Mentor-3 has 6 years, Mentor-4 has 18 years, Mentor-5 has 16 years of working experience. According to this, the avarage work experience of the mentors in the institution is 16 years. All mentors have computer and internet access. Three of the mentors are hesitant about their computer competency, one of them feels incompetent and one states that she is competent. All of them are interested in integrating technology in English teaching and they want to improve themselves in this subject. The mentors, who had no experience as a mentor before but want to improve themselves about technology, and the mentees, who want to improve their knowledge and skills in English, stated that they were willing and volunteering to participate in this study. The mentees in the workgroup, or the student teachers are 32 male and 14 female second year students who continue their education in Ege University, Faculty of Education, Department of Computer and Instructional Technology Education. All the students except one had computer access and except four students, all of them had internet access.

E-mentoring Process

In this short-term formal mentoring process, depending on structured e-mentoring model (Single & Single, 2005), planning, acting and evaluation steps were followed.

Planning phase

It was decided that the study would be carried out during the Fall Semestre of 2015-2016 academic year, in Material Design and Use in Education course of Computer Education and Instructional Technology Program at Faculty of Education. In the theoretical part of this course, it is aimed that sudents will gain the basic knowledge and skills about the importance and reasons of using technology and materials in education, the choice of teaching materials, principles of visual design, visual, audial and audio-visual aids used in education, the place and importance of the internet and communication technologies in distant education practices (EU-EBYS, 2016). In the practical part of the course, CT student teachers design different types of teaching materials according to the principles of visual design by working in cooperative groups. In this study, related to the goals of the course, it was aimed to produce digital English class materials by encouraging instructors of English to use communication technologies and

improve ICT student teachers' knowledge of English. With this respect, it was decided that CT student teachers would be mentees and instructors of English would be mentors.

In the study, practice of blended mentoring was planned to enable mentors and mentees work more efficiently by increasing their communication and interaction. In these terms, supporting information share and carring out the interactions on a standard platform via online social network Edmodo as well as weekly face to face meetings were foreseen. As Kuzu, Kahraman and Odabaşı (2012) state, in e-mentoring process, online platforms which can be arranged as common areas, mentor area and mentee area, can bring mentors, mentees, and if there are, coordinators together. In this study, on Edmodo, a shared virtual environment for mentors and mentees being together in the class and a different shared virtual environment for mentors and coordinators were created. Edmodo had been used by the ICT mentors and student teachers before, but mentors of English had never used it. Therefore, the mentors of English were informed about how to use Edmodo by the ICT mentors. Besides this platform, the mentors of English and mentees made a schedule together to meet face to face in the consultancy hours, and the ICT mentors and mentees planned to meet face to face in their weekly classes.

Acting phase

In the acting phase, with their mentors of English, ICT student teachers designed e-materials in types of animation, interactive visual and educational video for pre-intermediate English prep class students. Student teachers worked in small groups. There were 12 groups and each group had one mentor. Each mentor did consultancy for two or three groups. During this 14-week work, the instructors of English mentored the student teachers to create the content, write the scenarios in the educational videos and pronounce the words through both online and face to face meetings.

Evaluation phase

The findings about whether this practice reached its goal or not, were tried to be determined in accordance with the views of the participants as to present the different view points of individuals as Stake suggests (Fitzpatrick, Sanders & Worthen, 2004). The evaluation data was collected via mentor and mentee questionaires created for this purpose.

Data Collection Tools

The data collection tools, which were finalized by getting three ICT experts' views, are as follows:

ICT student teacher questionaire

In this form created by the researchers, there are 11 questions, including personal information, open-ended and yes/no type of questions. Among these questions, as well as personal questions asking students about their computer and internet access, there are three-point type of questions as, 'Please rate the contribution of your mentor in your material development work' and open-ended questions such as 'State the contributions of your mentor to your work'.

Mentor of English questionnaire

In this form created by the researchers, there are 10 questions including personal information, open-ended and yes/no type of questions. Among these questions, as well as asking the mentors personal questions about their computer and internet access, there are three-point type of questions such as 'How do you evaluate working with the mentees as being their mentors?' and open-ended type of questions like 'State your contributions to this collaborative work in Material Design and Use in Education course.'

Data Analysis

The data set of the study consists of documents. The data, which was collected electronically, was stored in two sepearate electronic files. According to this arrangement, the data set consists of 22 pages; 17 pages of which include the data collected by the student teacher questionaire and five pages of which include the data collected by the mentor questionaire. According to Yıldırım and Şimşek (2013), document analysis is analysing the written materials which include the information about the subject or phenomenon being researched. Two researchers analysed the qualitative data by following the description, analysis and interpretation phases. The whole data set was read by the researchers three times and a data analysis plan was prepared after reading the necessary parts many times. As Yurdakul (2008) states, in this process with an

inductive approach, preparation, coding of the qualitative data, reaching the themes, organising the data, interpretation of the qualitative findings and reporting took place.

As Yıldırım and Şimşek (2008) suggest, researchers created a system where data can be organized by thematic coding and in this sense they used an electronic spreadsheet programme. As seen in Figure 1, in the data analysis and reporting processes researchers had the chance to work together on a shared platform using cloud computing system. In the final phase, the data used in this system was defined according to some specific phenomena and presented in an understantable language for the readers.

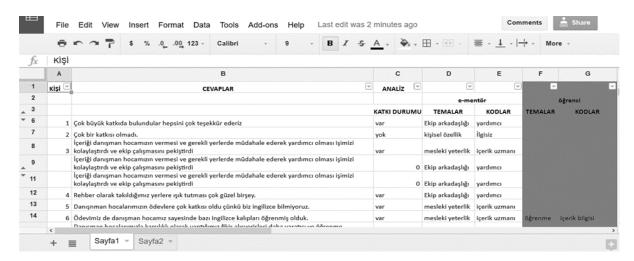


Figure 1. A sample from the electronic table showing data analysis

Cautions for Validity and Reliability

Researhers need to use extra methods (triangulation, participant confirmation, colleague confirmation) in the validation of the data and the results they reach in order to draw a holistic picture (Yıldırım & Şimşek, 2008). Cautions taken for validity and reliability of qualitative research are as follows: explaining how the results were reached in a detailed report, describing the roles of the researchers, reflecting different points of view and the data being coded by also another researcher. The whole data set was analysed again by a second coder who is an expert in curriculum. The researcher reported the findings by after reviewing the whole data analysis with the second coder. In terms of research ethics participants' individual rights were protected by taking precautions, such as stating the aims of the research in written and oral forms, keeping the personal information and data collected private.

Researchers' Roles

The researchers who took part in the research were two ICT lecturers, one MA student and an instructor. One of the lecturers acted as the lecturer of the course, coordinator of the research and the second coder in the data analysis; the MA sudent acted as an assistant in the acting and reporting phases and the instructor participated as a facilitator by mentoring the other instructors. The lecturer with 13 years of experience in the field has been lecturing in the Material Design and Use in Education course for nine years and has had five years of experience in managing virtual classrooms via Edmodo.

The findings of the study of the research include the views of ICT student teachers about the qualities of their b-mentors and also the views of both the ICT lecturers and the instructors of English about the b-mentoring practice, in accordance with the subgoals of the study.

Views of Mentees about the Qualities of Mentors

37 (80.4%) student teachers who participated in the study state that b-mentoring process contributed to their material development work, whereas four student teachers stated it didn't bring any contribution. Five student teachers made no remark on this. Sudent mentors described the qualities of the mentors. The themes and categories revealed in the data analysis can be seen in Table 1.

Table 1. *Themes and categories revealed in data analysis*

Theme	Categories	f
1. Co-worker	 Facilitator 	14
	 Guide 	11
	 Collaborative 	4
	 Advisor 	3
2. Professional competency	 Content expert 	17
	 Teaching skills 	5
3. Personal characteristics	Open to communication	5
	 Interested 	4
	 Uninterested 	4

Table 1 shows that the student teachers described the b-mentoring qualities of the mentors in three main themes and nine categories. It can be identified that the most uttered categories are content expert, facilitator and guide, respectively.

The theme of co-worker quality is examined under the subcategories of facilitator, guide, advisor and collaborative. Student teachers mentioned that the mentors acted as facilitators in the following statements:

'Our mentor contributed a lot to our assignment. She helped with a lot of things.' (Student Questionnaire -16)

'We did almost 80% percent of it (the work) thanks to our teachers.'

(Student Questionnaire-23)

'They completed the missing parts we had in the materials we created.'

(Student Questionnaire -25)

'Thanks to our mentor teachers, they put almost the same amount of effort as we did, sometimes even more than we did.' (Student Questionnaire-31)

Another mentor quality that the student teachers reflected is mentors' acting as a guide. The views on this quality are exemplified as 'They guided (us) to make the topic understood and this was quite successful' (Student Questionnaire-20) and 'She directed and guided us on all of the materials we prepared...' (Student Questionnaire-26).

Another mentor quality that the student teachers emphasized is identified as colaborating. The expressions 'We worked together coherently.' (Student Questionnaire-16) and 'Our teacher made great contributions to our work as we interacted each other.' (Student Questionnaire-26) support this view. The advisor quality of the mentors is expressed in 'I think sharing ideas with our mentors helped us a lot to be creative and to produce long lasting materials for learning.' (Student Questionnaire-7) and 'She also helped us with the content and the idea.' (Student Questionnaire-17). So student teachers described the mentors as coworking, facilitating, guiding, and also advising and collaborating individuals. They emphasize the mentors' facilitating and guiding qualities.

Among the mentors' qualities, the theme of professional competence is explained in categories of content expert and teaching skill. Student teachers stated that the mentors helped them with the preparation of the content:

'For the English part, having a teacher to ask directly and learn accelerated the process.' (Student Questionnaire-8)

'Eventually we don't have full command over English, so she helped a lot to prepare the content.' (Student Questionnaire-12)

'Although she was very busy, she tried to do her best to send us the content needed for the materaials as soon as possible'. (Student Questionnaire-24)

'She provided all the things that would be useful for us, such as the place we would use, materials.' (Student Questionnaire-38)

Besides this, it is also clear that the mentors supported the mentees in terms of teaching by sharing their experiences. The student teachers expressed, 'We obtained useful materials benefitting from their teaching experiences.' (Student Questionnaire-26) and 'The explanatory answers she gave in the necessary parts helped (us) to progress in the topic.' (Student Questionnaire-36). It is seen that student mentors are so much in need for their mentors' expertise in the content knowledge and they rely on them. They also want to be supported by their mentors in terms of professional development and they want them to be professionally competent.

Another mentor quality is given in categories of open to communication, interested and uninterested, under the theme of personal characteristics. Student mentors didn't express much about the personal characteristics of mentors. They expressed their positive and negative views depending on the interaction they had during the process. About mentors' being open to communication, they stated the following:

'Our dialogue with our teacher was very good.' (Student Questionnaire-21)

'She made us feel relaxed when we were with her and she treated us very mutually.' (Student Questionnaire-24)

'By responding our questions right away, she avoided possible delays related tocommunication.' (Student Questionnaire-30)

As another positive quality, the student teachers stated that their mentors were interested. They expressed, 'As she was interested and friendly, we could easily ask questions when we got stuck.'

(Student Questionnaire-24), 'They put a lot more effort than we did and they made the process enjoyable.' and 'they showed a lot of interest'. (Student Questionnaire-32)

Apart from these positive qualities, there are views (f=4) which reveal that the mentors were uninterested. 'She didn't contribute much.' (Student Questionnaire-2) and 'I think we could do it by ourselves and actually it was like that most of the time.' (Student Questionnaire-41) are examples for the views that reveal b-mentoring process didn't make any contributions to the material development work. According to this, student teachers evaluated the personal characteristics of the mentors in terms of their contribution to their work. The attitudes of the mentors during the process were expressed as whether they were open to communication and interested or not.

Mentees' views about the b-mentoring process

In addition to their views about the mentor qualities, the student teachers also reviewed the contributions of the b-mentoring process. These contributions are given in facilitating (f=9), cooperation (f=6), learning (f=6) and professional development (f=3) themes. The related examples are as follows:

'They made our work easier as they suggested projects.' (facilitating) (Student Questionnaire-27)

'We had the joy of producing as a group and my group awareness increased.' (Student Questionnaire-10)

'It was very good for us to improve our English.' (Student Questionnaire-16)

'I think sharing ideas with our mentors helped us a lot to be creative and to produce long lasting materials for learning.' (Student Questionnaire-7)

With these views it is noticed that student teachers benefited from the process and they gained some experiences while working in collaboration. It is noticed that the mentors, who have an average of 16 years of working experience, were able to transfer knowledge to support the student teachers' professional development and facilitate their work through the b-mentoring process.

Mentors' views about b-mentoring process

Mentors, who are the instructors of English, expressed positive views (f=4) about the b-mentoring practice carried out with the ICT student teachers. Only one mentor stated she was hesitant. In addition to this, all of the mentors stated that they would want to participate and give support to this type study again if it was repeated. Their views about the contributions of this study are as fallows:

'It brought action to our everyday teaching routine...as I stated before, we became aware of different types of pc programmes...if possible, I would like us to apply them by ourselves soon.' (Mentor Questionnaire-1)

'I got information about new presentation techniques and my awareness increased. I got to know a new student profile. I had the chance to know you and work with you.' (Mentor Questionnaire-2)

'I had the chance to learn a couple of teaching platforms.' (Mentor Questionnaire-1)

'It was a bit time consuming, although the students took care of the programmes, it took a little more than we had thought...but it was fun...' (Mentor Questionnaire-4)

'It provided opportunity to learn about virtual classroom applications and digital material tools.' (Mentor Questionnaire-5)

In this respect, mentors qualify this process, in which they interacted with the mentees, useful in terms of their own professional development. They stated that they were acknowledged about the idea of producing different applications via new tools. When the views of mentors and mentees are considered together, it is seen that both the mentors and the mentees collaberated during the material development process, the process made positive contributions to their work and they mainly hold positive views of the b-mentoring practice.

Discussion, Conclusion and Suggestions

In this study, which is a blended mentoring practice for designing e-material for English as a foreign language learning, the views of the student teachers in the role of mentee and the views of the instructors of English in the role of mentor about the b-mentoring practice and the contributions of this practice are dealt with. The study reveals that two participant groups mainly hold positive views about the b-mentoring process. The prominent findings show that

according to the student teachers, the mentors are facilitating and guiding as a coworker and supporting in professional terms as they are the experts of the content. In addition, student teachers state that as for their personal characteristics, the mentors are open to communication and interested in the student teachers' work. These qualities are supported by various research findings in the literature (Arkün Kocadere & Kızılkaya Cumaoğlu, 2015; Kılınç & Alparslan, 2014; Özdemir, 2015). In this respect, it is considered that the participant mentors fulfilled their responsibilities in the study.

A significant number of student teachers who took part in the study, expressed that b-mentoring made positive contributions to their work. Besides, almost all the mentors expressed their satisfaction with the b-mentoring practice. These findings support both the finding of Lamb and Aldous (2012), which reveals that b-mentoring practice has positive effects as mentors transfer their experiences to mentees and Murphy's (2011) finding which shows positive contributions of b-mentoring to mentors and mentees. Also, like in the study carried out by Thompson and et.al. (2010), in this study all the mentors stated that they would like to participate b-mentoring practices again. Moreover, in this study the problems such as technical problems and mentors' not meeting the expectations, which were encountered in the study of Cothran et. al., weren't detected. In terms of fulfilling their own responsibilities, both the mentors and the mentees reacted positively to a blended model in which both electronic media and face to face meetings were used. As Thompson and et. al. emphasized, blended forms are needed in e-mentoring practices since using just electronic communication is ineffective.

As Arkün Kocadere and Kızılkaya Cumaoğlu (2015) stated, if applied well, especially when mentor-mentee matching is done well, mentoring practice provides contributions to both mentor and mentee's personal and professional development. Although there was no criteria, except for volunteering, to participate in this study and no specific procedure was followed to match the mentors and mentees, in general the findings show mentors and mentees worked together collaboratively.

In conclusion, this practice, which was aimed to create digital learning materials with the help of mentors as the content experts, and was conducted in a collaborative, interdisciplinary, interactive learning environment of b-mentoring process, reached its aim. Therefore; in the light of its findings, the following suggestions are made:

- In data collection process, more detailed data could be collected by means of interviews and observations as well as questionnaires. In this way, b-mentoring process can be examined thoroughly.
- 2. In addition to matching collaborative groups with mentors like in this study, one to one b-mentoring practices could be done to carry out effectiveness studies.
- 3. In this study few problems, such as mentors' not dealing with the mentees were determined. Further research in order to determine and eliminate problems which might affect b-mentoring process negatively should be conducted.
- 4. Analysing the effects of b-mentoring practices on various variables with the use of not only descriptive but also experimental studies will contribute to literature.
- 5. Suitable courses in other departments of education could be chosen to conduct studies on b-mentoring practices, and then the results of these studies could be compared.

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